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NOTICE OF ALLOWANCE AND FEE(S) DUE

22850 7590 01/23/2009

01/23/2009

OBLON, SPIVAK, MCCLELLAND MAIER & NEUSTADT, P.C. 1940 DUKE STREET ALEXANDRIA. VA 22314 EXAMINER

HUYNH, PHUONG

ART LINIT PAPER NUMBER

2857 DATE MAILED: 01/23/2009

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/563,158	06/13/2006	Gerald Leminoux	283122US2XPCT	8408

TITLE OF INVENTION: METHOD AND DEVICE FOR ESTIMATING THE TOTAL MASS OF A MOTOR VEHICLE

APPLN. TYPE	SMALL ENTITY	ISSUE FEE DUE	PUBLICATION FEE DUE	PREV. PAID ISSUE FEE	TOTAL FEE(S) DUE	DATE DUE
nonprovisional	NO	\$1510	\$300	\$0	\$1810	04/23/2009

THE APPLICATION IDENTIFIED ABOVE HAS BEEN EXAMINED AND IS ALLOWED FOR ISSUANCE AS A PATENT. PROSECUTION ON THE MERITS IS CLOSED. THIS NOTICE OF ALLOWANCE IS NOT A GRANT OF PATENT RIGHTS. THIS APPLICATION IS SUBJECT TO WITHDRAWAL FROM ISSUE AT THE INITIATIVE OF THE OFFICE OR UPON PETITION BY THE APPLICANT. SEE 37 CFR 1.313 AND MPEP 1308.

THE ISSUE FEE AND PUBLICATION FEE (IF REQUIRED) MUST BE PAID WITHIN THREE MONTHS FROM THE MAILING DATE OF THIS NOTICE OR THIS APPLICATION SHALL BE REGARDED AS ABANDONED. THIS STATUTORY PERIOD CANNOT BE EXTENDED. SEE 35 U.S.C. 151. THE ISSUE FEE DUE INDICATED ABOVE DOES NOT REFLECT A CREDIT FOR ANY PREVIOUSLY PAID ISSUE FEE IN THIS APPLICATION. IF AN ISSUE FEE HAS PREVIOUSLY BEEN PAID IN THIS APPLICATION (AS SHOWN ABOVE), THE RETURN OF PART B OF THIS FORM WILL BE CONSIDERED A REQUEST TO REAPPLY THE PREVIOUSLY PAID ISSUE FEE TOWARD THE ISSUE FEE NOW DUE.

HOW TO REPLY TO THIS NOTICE:

I. Review the SMALL ENTITY status shown above.

If the SMALL ENTITY is shown as YES, verify your current SMALL ENTITY status:

A. If the status is the same, pay the TOTAL FEE(S) DUE shown above.

B. If the status above is to be removed, check box 5b on Part B Fee(s) Transmittal and pay the PUBLICATION FEE (if required) and twice the amount of the ISSUE FEE shown above, or

If the SMALL ENTITY is shown as NO:

A. Pay TOTAL FEE(S) DUE shown above, or

B. If applicant claimed SMALL ENTITY status before, or is now claiming SMALL ENTITY status, check box 5a on Part B - Fee(s) Transmittal and pay the PUBLICATION FEE (if required) and 1/2 the ISSUE FEE shown above.

II. PART B - FEE(S) TRANSMITTAL, or its equivalent, must be completed and returned to the United States Patent and Trademark Office (USPTO) with your ISSUE FEE and PUBLICATION FEE (if required). If you are charging the fee(s) to your deposit account, section "4b" of Part B - Fee(s) Transmittal should be completed and an extra copy of the form should be submitted. If an equivalent of Part B is filed, a request to reapply a previously paid issue fee must be clearly made, and delays in processing may occur due to the difficulty in recognizing the paper as an equivalent of Part B.

III. All communications regarding this application must give the application number. Please direct all communications prior to issuance to Mail Stop ISSUE FEE unless advised to the contrary.

IMPORTANT REMINDER: Utility patents issuing on applications filed on or after Dec. 12, 1980 may require payment of maintenance fees. It is patentee's responsibility to ensure timely payment of maintenance fees when due.

PART B - FEE(S) TRANSMITTAL

Complete and send this form, together with applicable fee(s), to: Mail Mail Stop ISSUE FEE Commissioner for Patents P.O. Box 1450 Alexandria, Virginia 22313-1450

or Fax (571)-273-2885

INSTRUCTIONS: This f appropriate. All further c indicated unless corrected maintenance fee notificati	form should be used f orrespondence includin d below or directed oth ons.	or tran ig the l ierwise	smitting the ISSU Patent, advance or in Block 1, by (a					nould be completed where correspondence address as rate "FEE ADDRESS" for
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APPLICATION NO.	FILING DATE			FIRST NAMED INVENTOR	FOR ATTORNEY DOCKET NO. CONFIRMA			CONFIRMATION NO.
10/563,158	06/13/2006			Gerald Leminoux		28	33122US2XPCT	8408
TITLE OF INVENTION:								T
APPLN. TYPE	SMALL ENTITY	IS:	SUE FEE DUE	PUBLICATION FEE DUE	PREV. PAID ISSU	E FEE	TOTAL FEE(S) DUE	DATE DUE
nonprovisional	NO		\$1510	\$300	\$0		\$1810	04/23/2009
EXAMI	NER		ART UNIT	CLASS-SUBCLASS				
HUYNH, P	HUONG		2857	702-173000	_			
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Publication Fee (No small entity discount permitted)			ed)	Payment by credit card. Form PTO-2038 is attached.				
Advance Order - # of Copies The Director is hereby authorized to charge the required fee(s), any deficiency, or credit any overpayment, to Deposit Account Number (enclose an extra copy of this form)								
	SMALL ENTITY statu	s. See	37 CFR 1.27.	b. Applicant is no lor				
NOTE: The Issue Fee and interest as shown by the re	Publication Fee (if requeeords of the United Sta	rired) v tes Pate	will not be accepted and Trademark	d from anyone other than Office.	the applicant; a regi	istered :	attorney or agent; or th	e assignee or other party in
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22850	7590 01/23/2009	EXAMINER			
OBLON, SPIVA	AK, MCCLELLAND	HUYNH, PHUONG			
1940 DUKE STR		ART UNIT	PAPER NUMBER		
ALEXANDRIA,	VA 22314	2857			

Determination of Patent Term Adjustment under 35 U.S.C. 154 (b)

(application filed on or after May 29, 2000)

The Patent Term Adjustment to date is 0 day(s). If the issue fee is paid on the date that is three months after the mailing date of this notice and the patent issues on the Tuesday before the date that is 28 weeks (six and a half months) after the mailing date of this notice, the Patent Term Adjustment will be 0 day(s).

If a Continued Prosecution Application (CPA) was filed in the above-identified application, the filing date that determines Patent Term Adjustment is the filing date of the most recent CPA.

Applicant will be able to obtain more detailed information by accessing the Patent Application Information Retrieval (PAIR) WEB site (http://pair.uspto.gov).

Any questions regarding the Patent Term Extension or Adjustment determination should be directed to the Office of Patent Legal Administration at (571)-272-7702. Questions relating to issue and publication fee payments should be directed to the Customer Service Center of the Office of Patent Publication at 1-(888)-786-0101 or (571)-272-4200.

Notice of Allowability

Application No.	Applicant(s)
10/563,158	LEMINOUX ET AL.
Examiner	Art Unit
PHUONG HUYNH	2857

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS. This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

- This communication is responsive to RCE filed 12/11/2008.
- The allowed claim(s) is/are 11-14 and 16-21.
- 3. Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - b) ☐ Some* c) ☐ None of the: a) 🔯 All
 - 1. A Certified copies of the priority documents have been received.
 - 2. Certified copies of the priority documents have been received in Application No.
 - 3. Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).
 - * Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application. THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

- A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
- CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
 - (a) Including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
 - 1) hereto or 2) to Paper No./Mail Date
 - (b) including changes required by the attached Examiner's Amendment / Comment or in the Office action of

Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).

- 6.

 DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.
- Attachment(s)
- 1. | Notice of References Cited (PTO-892)
- 2. Notice of Draftperson's Patent Drawing Review (PTO-948)
- Information Disclosure Statements (PTO/SB/08). Paper No./Mail Date
- 4. T Examiner's Comment Regarding Requirement for Deposit
- of Biological Material
- 5. Notice of Informal Patent Application
- Interview Summary (PTO-413), Paper No./Mail Date
- 7.

 Examiner's Amendment/Comment
- 8. X Examiner's Statement of Reasons for Allowance

/Hal D Wachsman/

Primary Examiner, Art Unit 2857

9. ☐ Other

Application/Control Number: 10/563,158

Art Unit: 2857

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 12/11/2008 has been entered.

Allowable Subject Matter

2. Claims 11-14, and 16-21 are allowed.

The following is an examiner's statement of reasons for allowance: (also see Applicant's Remarks dated 11/06/2008 and the Office Action dated 11/28/2008):

Lingman (USPAP. 2004/0167705) discloses Method for estimating the mass of a vehicle which is being driven on a road with varying gradient, comprising the following method steps: measurement of the vehicle's speed for generating input data for a calculation device; measurement of a variable which comprises a longitudinal force acting on the vehicle for generating input data for a calculation device, and method for estimating the gradient of a road on which a vehicle is being driven, comprising the following method steps: measurement of the vehicle's speed for generating input data for a calculation device; measurement of a variable which comprises a longitudinal force

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acting on the vehicle for generating input data for a calculation device [see Lingman:

Abstract; Paragraphs [0007], [0011], [0020], [0034], [0036], and [0094]].

Iwasaki (USPN. 5,944,763) discloses that in an apparatus and method for a vehicular system, a control gain of a control signal to be outputted to the vehicular system is varied when a change in a weight of load applied to a vehicle body between an originally designed weight of load applied to a vehicle body and a present weight of load applied to the vehicle body occurs. The change in the weight of load applied to the vehicle body is determined according to a load mounted state determination signal R_M which is derived on the basis of a front road wheel side vertical status variable and a rear road wheel side vertical status variable [see Iwasaki: Abstract; Abstract; col. 2, lines 29-60].

Regarding claim 11, the closest prior art (Lingman and Iwasaki), either singularly or in combination, fail to anticipate or render obvious wherein "estimating the inclination of the surface on which the motor vehicle is traveling based on the acceleration variation due to errors, the recusive least-squares algorithm depends on the inclination and has at least tow modes, a flat mode when the inclination is within a predetermined interval of values corresponding to a plane surface, and a slope mode when the inclination is not within the predetermined interval of values corresponding to the plane surface" in combination with all other limitations in the claims as defined by Applicant.

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Claims 12-14, and 16-18 depend from allowed claim 11 and therefore are also allowed.

Regarding claim 19, the closest prior art (Lingman and Iwasaki), either singularly or in combination, fail to anticipate or render obvious wherein "means for estimating total mass of the vehicle by a recursive least-squares Second Law of Motion, by analysis of errors, by an acceleration variation due to errors comprising an error in variation of the mass of the vehicle relative to a reference mass, an error in inclination of the surface on which the vehicle is traveling, and errors of a model; meas for enablying the processing of the data when the data remains respectively in predetermined intervals of values that ensure validity of the model; and supervising means for providing a default mass as long as the algorithm has not converged, by fixing the estimated mass when a predetermined convergence criterion has been reached" in combination with all other limitations in the claims as defined by Applicant.

Claims 20-21 depend from allowed claim 19 and therefore are also allowed.

Conclusion

3. Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance." Application/Control Number: 10/563,158

Art Unit: 2857

Any inquiry concerning this communication or earlier communications from the examiner should be directed to PHUONG HUYNH whose telephone number is (571)272-2718. The examiner can normally be reached on M-F 8:30AM-5:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Eliseo Ramos-Feliciano can be reached on 571-272-7925. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/P. H./

/Hal D Wachsman/

Primary Examiner, Art Unit 2857

Examiner, Art Unit 2857

January 12, 2009